What is claimed is:

1. A semiconductor device comprising:

a fluorine-insulating film formed on a wiring layer; and

a fluorosilicate glass film formed above the wiring layer and the fluorine-insulating film.

2. A semiconductor device comprising:

a fluorosilicate glass film for insulating a wiring layer; and

a first and second fluorine-insulating film formed so as to sandwich the fluorosilicate glass film from above and below.

3. The semiconductor device according to claim 1, wherein the fluorine-insulating film comprises an undoped silicon oxide film.

4. The semiconductor device according to claim 1, wherein the wiring layer comprises a structure comprising TiN, Al-Cu, Ti, and TiN.

5. A thin film forming method comprising:

forming an undoped silicon oxide film on a wiring layer; and

forming a fluorosilicate glass film on the undoped silicon oxide film.

6. The thin film forming method according to claim 5, further comprising a step of forming an undoped silicon oxide film on the fluorosilicate glass film.

7. The thin film forming method according to claim 5, wherein the undoped silicon oxide film and the fluorosilicate glass film are continuously formed by alternating between mixing a fluorine dopant and not mixing the fluorine dopant.

8. The semiconductor device according to claim 2, wherein the first and second fluorine-insulating films comprise an undoped silicon oxide film.

9. The semiconductor device according to claim 2, wherein the wiring layer comprises a structure comprising TiN, Al-Cu, Ti, and TiN.

10. The thin film forming method according to claim 6, wherein the undoped silicon oxide film and the fluorosilicate glass film are continuously formed by alternating between mixing a fluorine dopant and not mixing the fluorine dopant.

11. A semiconductor device as set forth in claim 2, wherein said first fluorine insulating film has a thickness of approximately 500 Å to approximately 700 Å, and said second fluorine insulating film has a thickness of approximately 1000 Å.

12. A semiconductor device as set forth in claim 1, wherein said fluorine-insulating film has a thickness of approximately 500Å to approximately 700Å.